8a874

Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Hong Liu Examiner #: 77011 Date: 2/24/03
Art Unit: 1624 Phone Number 30 6-5814 Serial Number: 09/955,343
Mail Box and Bldg/Room Location: 9601 Results Format Preferred (circle): PAPER DISK E-MAIL
(CM2)

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

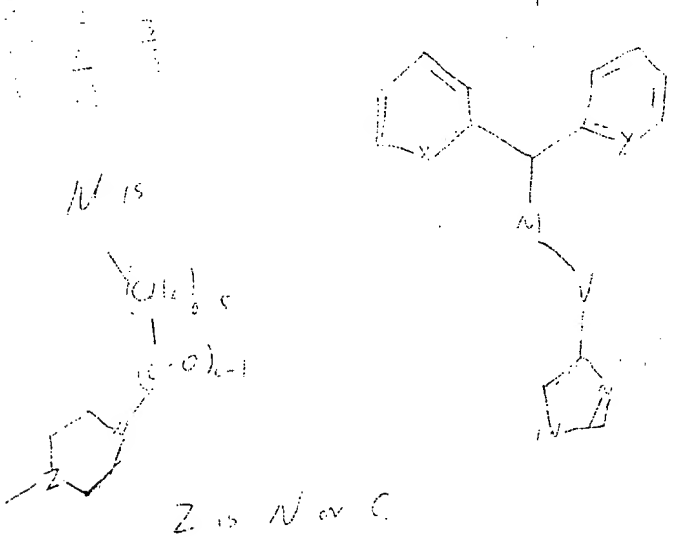
Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Barb please!



One of X and Y is N the other is carbon

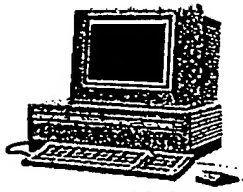
Point of Contact.
Barb O'Bryen
Technical Information Specialist
STIC CM1 6A05 308-4291

****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: [illegible]	NA Sequence (#) _____	STN 246
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) 1	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: 2-24-03	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: 20	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: 30	Other _____	Other (specify) _____

PTO-1590 (8-01)

BioTech-Chem Library
Search Results
Feedback Form (Optional)



Scientific & Technical Information Center

The search results generated for your recent request are attached. If you have any questions or comments (compliments or complaints) about the scope or the results of the search, please contact *the BioTech-Chem searcher* who conducted the search *or contact*:

Mary Hale, Supervisor, 308-4258
CM-1 Room 1E01

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* *(Example: 1610)*
- *Relevant prior art found, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

  Types of relevant prior art found:
  - ☐ Foreign Patent(s)
  - ☐ Non-Patent Literature
    (journal articles, conference proceedings, new product announcements etc.)
- *Relevant prior art **not found**:*
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Search results were not useful in determining patentability or understanding the invention.

Other Comments:

Drop off completed forms at the **Circulation Desk CM-1**, or send to Mary Hale, **CM1-1E01** or **mary.hale@uspto.gov**

```
=> fil reg; d stat que l3; fil capl; d que nos l4; fil uspatf; d que nos l5; fil marpat;
d que nos l9
FILE 'REGISTRY' ENTERED AT 09:49:57 ON 24 FEB 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   21 FEB 2003  HIGHEST RN 493666-74-3
DICTIONARY FILE UPDATES:  21 FEB 2003  HIGHEST RN 493666-74-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf
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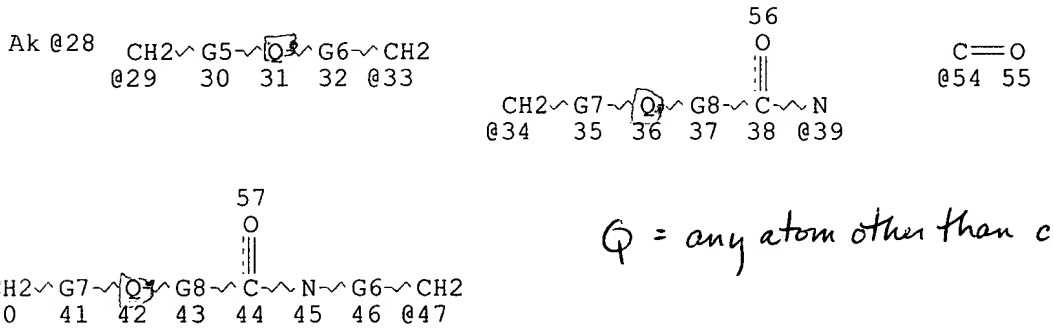
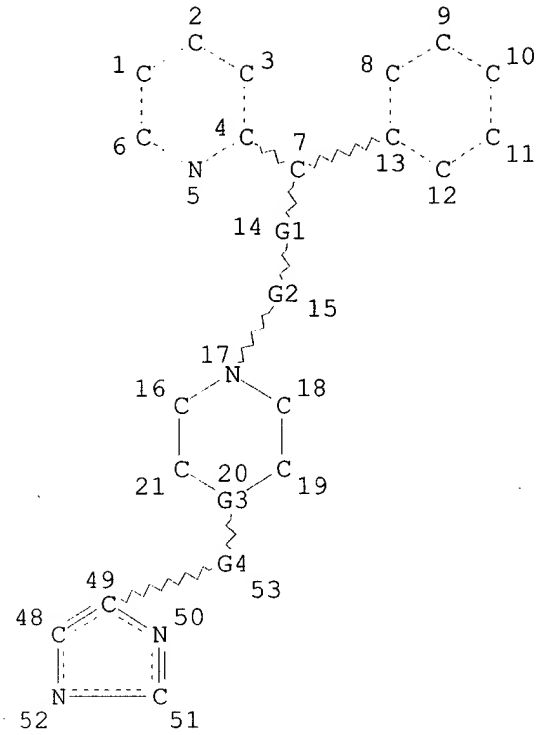
L1 STR



Q = any atom other than carbon or hydrogen

Page 1-A



Page 2-A
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REP G2=(0-1) 54
VAR G3=N/CH
VAR G4=28/29-20 33-49/34-20 39-49/40-20 47-49
REP G5=(1-7) CH2
REP G6=(0-4) CH2
REP G7=(1-3) CH2
REP G8=(0-3) CH2
NODE ATTRIBUTES:
CONNECT IS E2 RC AT 28
DEFAULT MLEVEL IS ATOM
MLEVEL IS CLASS AT 28 31 36 42
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 51

STEREO ATTRIBUTES: NONE
L3 23 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 1617 ITERATIONS 23 ANSWERS
SEARCH TIME: 00.00.01

FILE 'CAPLUS' ENTERED AT 09:49:57 ON 24 FEB 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 24 Feb 2003 VOL 138 ISS 9
FILE LAST UPDATED: 23 Feb 2003 (20030223/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

L1 STR
L3 23 SEA FILE=REGISTRY SSS FUL L1
L4 1 SEA FILE=CAPLUS ABB=ON L3

FILE 'USPATFULL' ENTERED AT 09:49:57 ON 24 FEB 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 20 Feb 2003 (20030220/PD)
FILE LAST UPDATED: 20 Feb 2003 (20030220/ED)
HIGHEST GRANTED PATENT NUMBER: US6523178
HIGHEST APPLICATION PUBLICATION NUMBER: US2003037360
CA INDEXING IS CURRENT THROUGH 20 Feb 2003 (20030220/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 20 Feb 2003 (20030220/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2002
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2002

>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

L1 STR
L3 23 SEA FILE=REGISTRY SSS FUL L1
L5 1 SEA FILE=USPATFULL ABB=ON L3

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FILE 'MARPAT' ENTERED AT 09:49:58 ON 24 FEB 2003
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FILE CONTENT: 1988-PRESENT (VOL 104 ISS 15-VOL 138 ISS 8)(20030221/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US    6506784 14 JAN 2003
DE   20211496 09 JAN 2003
EP    1276165 15 JAN 2003
JP 2003013033 15 JAN 2003
WO 2003003393 09 JAN 2003

Structure search limits have been raised.  See HELP SLIMIT for the new,
higher limits.


L1              STR
L8            7 SEA FILE=MARPAT SSS FUL L1
L9            5 SEA FILE=MARPAT ABB=ON  L8/COMPLETE


=> dup rem l4,l5,l9
FILE 'CAPLUS' ENTERED AT 09:50:04 ON 24 FEB 2003
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PROCESSING COMPLETED FOR L4
PROCESSING COMPLETED FOR L5
PROCESSING COMPLETED FOR L9
L10           6 DUP REM L4 L5 L9 (1 DUPLICATE REMOVED)
                ANSWER '1' FROM FILE CAPLUS
                ANSWER '2' FROM FILE USPATFULL
                ANSWERS '3-6' FROM FILE MARPAT

=> d ibib abs hitstr 1-2; d ibib abs qhit 3-6; fil hom

L10  ANSWER 1 OF 6  CAPLUS  COPYRIGHT 2003 ACS         DUPLICATE 1
ACCESSION NUMBER:        2002:428870  CAPLUS
DOCUMENT NUMBER:         137:20375
TITLE:                   Preparation of substituted imidazoles as dual
                         histamine H1 and H3 agonists or antagonists useful in
                         treatment of inflammatory diseases and allergic
                         conditions
INVENTOR(S):             Shih, Neng-Yang; Aslanian, Robert G.; Solomon, Daniel
                         M.; Rosenblum, Stuart B.; Mutahi, Mwangi Wa; Tom, Wing
                         C.; McCormick, Kevin D.; Piwinski, John J.; Wolin,
                         Ronald
PATENT ASSIGNEE(S):      Schering Corporation, USA
```

Searched by Barb O'Bryen, STIC 308-4291

SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

applicant

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002044141	A2	20020606	WO 2001-US29062	20010918
WO 2002044141	A3	20021107		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002041459	A5	20020611	AU 2002-41459	20010918
US 2002082278	A1	20020627	US 2001-955383	20010918

PRIORITY APPLN. INFO.: US 2000-234039P P 20000920
WO 2001-US29062 W 20010918

OTHER SOURCE(S): MARPAT 137:20375
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

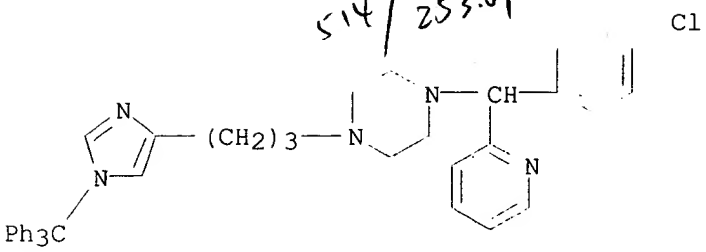
AB Title compds. I [R1 and R2 may no. 1-4 and independently = H, alkyl, alkoxy, halo, OH, etc.; R3 = H, alkyl, alkoxy, OH, with provision when n and k are both 0, then R3 is not OH or alkoxy; R4 = H, alkyl, polyhaloalkyl, or OH; X and Y are independently = N, CH and N(O); M = moiety of general structure II or III where Z = -(CH2)n(CO)k where k = 0-1, n = 0-5, and p = q = 0-2 with provision that when M = III, R3 is absent; V = alkyl, amidoalkyl, alkoxyalkyl, etc.] are prepd. and disclosed as dual histamine-H1 and H3 receptor antagonists. Thus, IV was prepd. via N-alkylation of N-[pyridin-2-yl-(4-chlorophenyl)]methylpiperazine with chloromethyltritylimidazole with subsequent deprotection. I were evaluated in H1 and H3 receptor binding assays with Ki for H1 ranging from 0.3-130 nM and for H3 1.7-80 nM. In another embodiment, the invention discloses pharmaceutical compns. comprising such imidazoles as well as methods of using them to treat allergy, nasal congestion, inflammatory and CNS-related diseases and others.

IT **433976-33-1P 433976-35-3P 433976-39-7P**
433976-40-0P 433976-43-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of substituted imidazoles as dual histamine h1 and h3 agonists or antagonists)

RN 433976-33-1 CAPLUS

CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-[3-[1-(triphenylmethyl)-1H-imidazol-4-yl]propyl]- (9CI) (CA INDEX NAME)

544/364
514/253.09



RN 433976-35-3 CAPLUS
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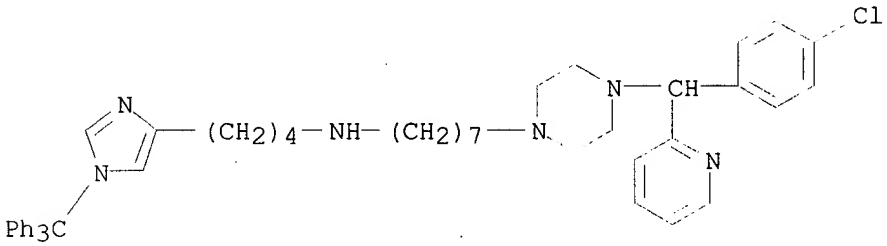
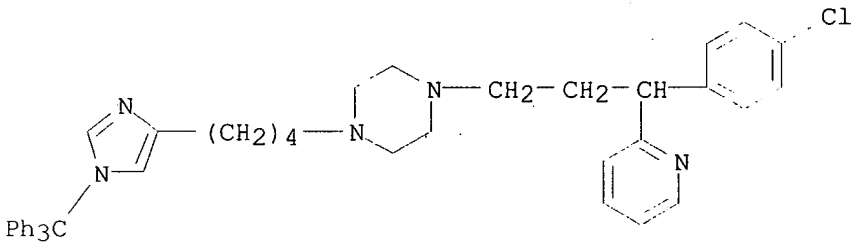


RN 433976-39-7 CAPLUS
CN Piperazine, 1-[3-(4-chlorophenyl)-3-(2-pyridinyl)propyl]-4-[4-[1-(triphenylmethyl)-1H-imidazol-4-yl]butyl]- (9CI) (CA INDEX NAME)



RN 433976-40-0 CAPLUS
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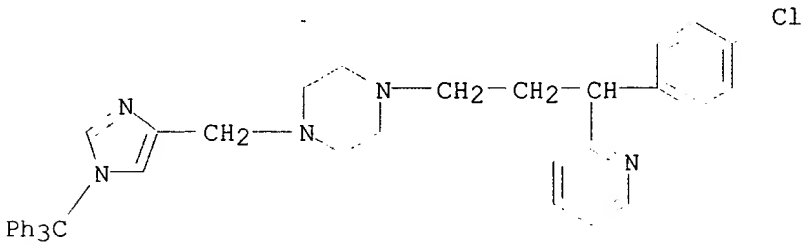

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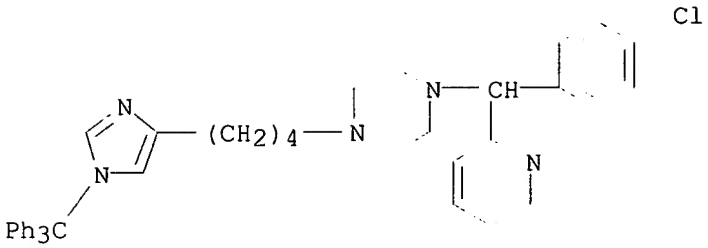

IT **433976-45-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of substituted imidazoles as dual histamine h1 and h3 agonists or antagonists)
RN 433976-45-5 CAPLUS
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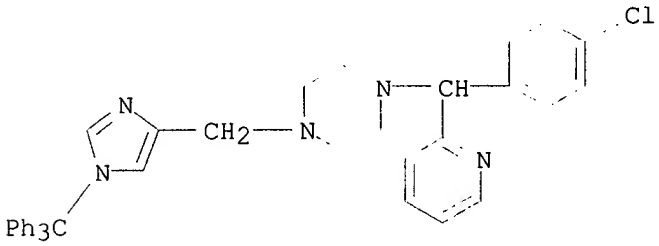
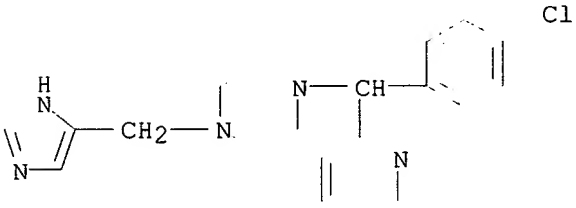


IT **433975-96-3P 433976-10-4P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(target compd.; prepn. of substituted imidazoles as dual histamine h1 and h3 agonists or antagonists)
RN 433975-96-3 CAPLUS
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-(1H-imidazol-4-ylmethyl)- (9CI) (CA INDEX NAME)



RN 433976-10-4 CAPLUS
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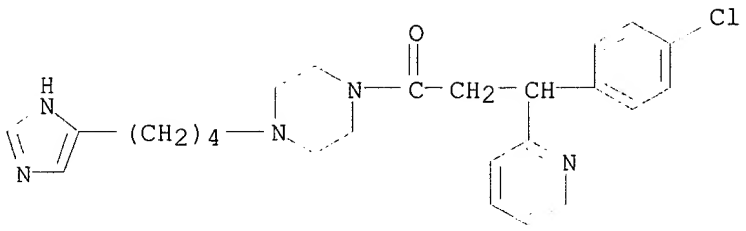

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433976-11-5P 433976-14-8P 433976-15-9P
433976-30-8P 433976-31-9P 433976-32-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compd.; prepn. of substituted imidazoles as dual histamine h1 and h3 agonists or antagonists)

RN 433975-97-4 CAPLUS
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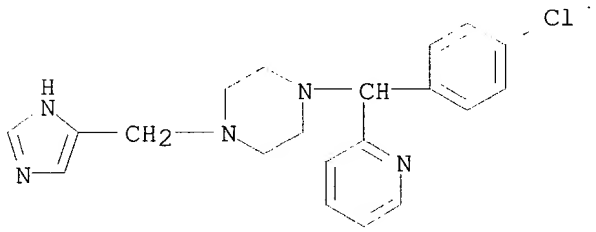

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RN 433976-02-4 CAPLUS
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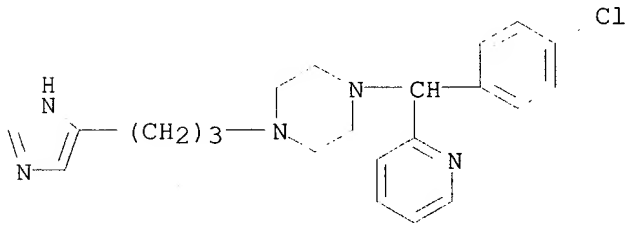

4 HCl

RN 433976-03-5 CAPLUS
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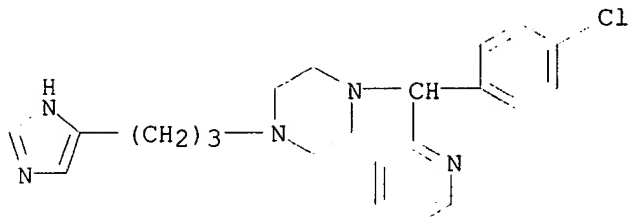
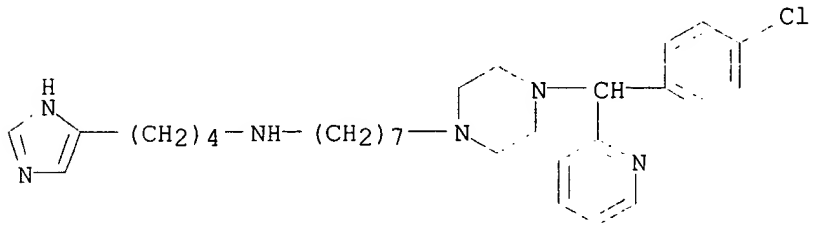
yl)propyl]- (9CI) (CA INDEX NAME)



RN 433976-04-6 CAPLUS
CN 1-Piperazineheptanamine, 4-[(4-chlorophenyl)-2-pyridinylmethyl]-N-[4-(1H-imidazol-4-yl)butyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 433976-05-7 CAPLUS
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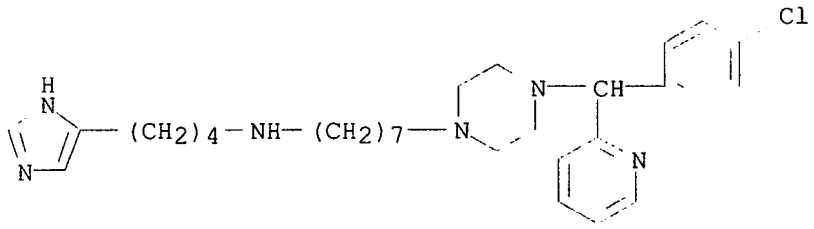
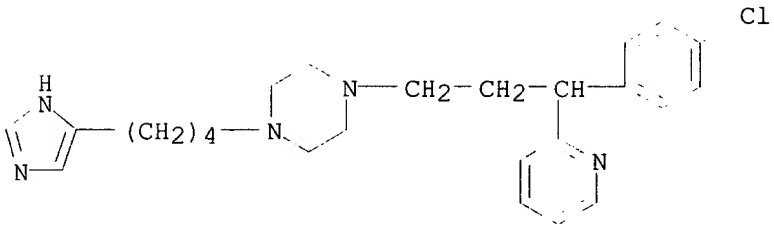


RN 433976-06-8 CAPLUS
CN Piperazine, 1-[3-(4-chlorophenyl)-3-(2-pyridinyl)propyl]-4-[4-(1H-imidazol-4-yl)butyl]-, hydrochloride (9CI) (CA INDEX NAME)



●x HCl

RN 433976-07-9 CAPLUS
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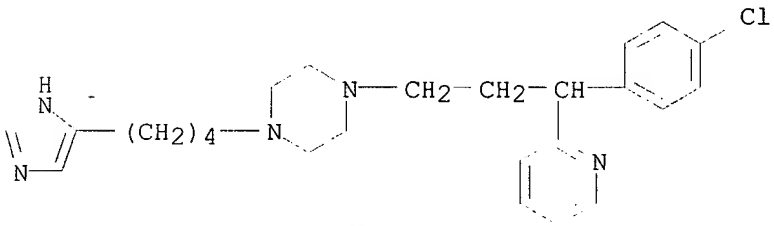
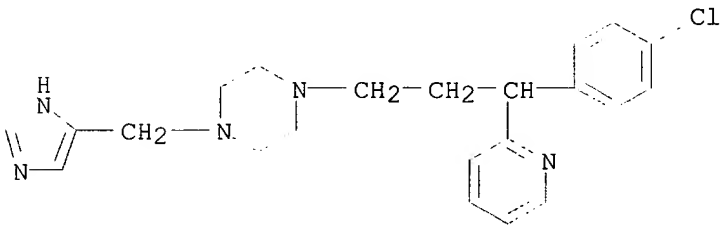
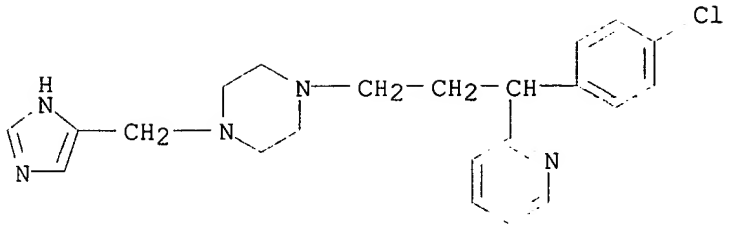


RN 433976-08-0 CAPLUS
CN Piperazine, 1-[3-(4-chlorophenyl)-3-(2-pyridinyl)propyl]-4-(1H-imidazol-4-ylmethyl)-, hydrochloride (9CI) (CA INDEX NAME)

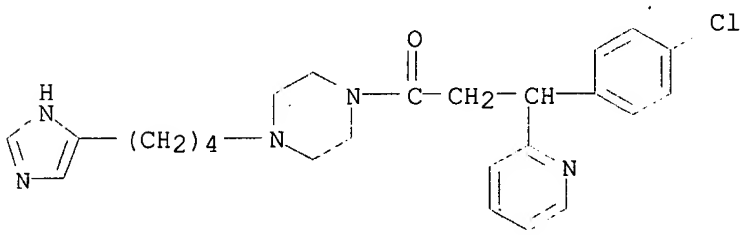


●x HCl

RN 433976-09-1 CAPLUS
CN Piperazine, 1-[3-(4-chlorophenyl)-3-(2-pyridinyl)propyl]-4-(1H-imidazol-4-ylmethyl)- (9CI) (CA INDEX NAME)

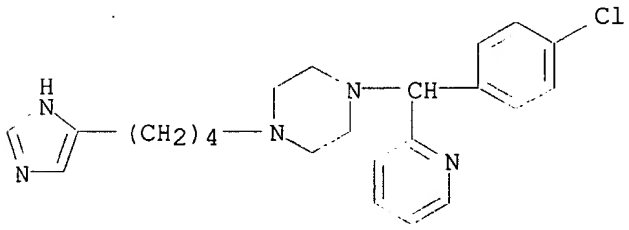


RN 433976-11-5 CAPLUS
CN Piperazine, 1-[3-(4-chlorophenyl)-1-oxo-3-(2-pyridinyl)propyl]-4-[4-(1H-imidazol-4-yl)butyl]-, hydrochloride (9CI) (CA INDEX NAME)



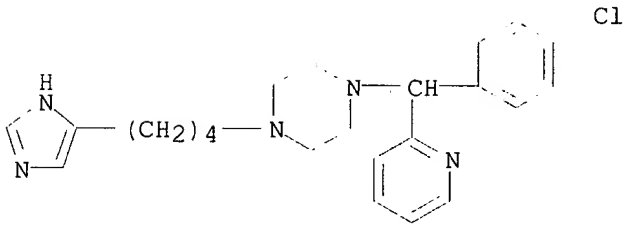
●x HCl

RN 433976-14-8 CAPLUS
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-[4-(1H-imidazol-4-yl)butyl]-, hydrochloride (9CI) (CA INDEX NAME)

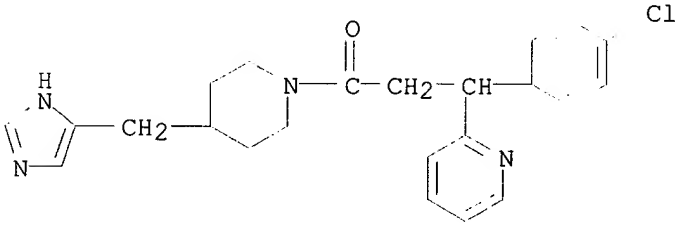


●x HCl

RN 433976-15-9 CAPLUS
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-[4-(1H-imidazol-4-yl)butyl]- (9CI) (CA INDEX NAME)



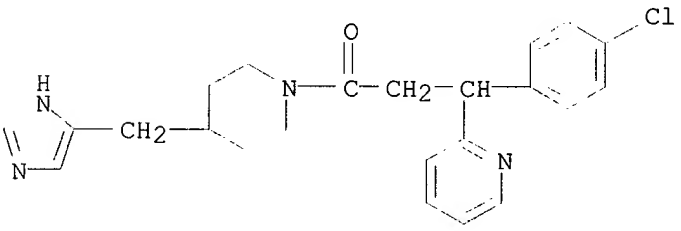
RN 433976-30-8 CAPLUS
CN Piperidine, 1-[3-(4-chlorophenyl)-1-oxo-3-(2-pyridinyl)propyl]-4-(1H-imidazol-4-ylmethyl)-, hydrochloride (9CI) (CA INDEX NAME)



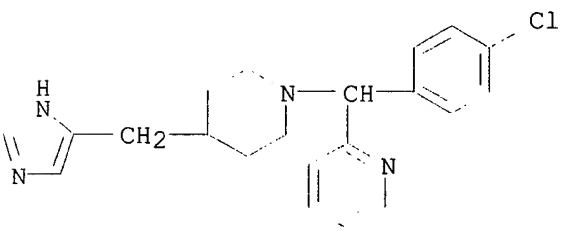
546/194
514/318

●x HCl

RN 433976-31-9 CAPLUS
CN Piperidine, 1-[3-(4-chlorophenyl)-1-oxo-3-(2-pyridinyl)propyl]-4-(1H-imidazol-4-ylmethyl)- (9CI) (CA INDEX NAME)



RN 433976-32-0 CAPLUS
CN Pyridine, 2-[(4-chlorophenyl)[4-(1H-imidazol-4-ylmethyl)-1-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 2 OF 6 USPATFULL

ACCESSION NUMBER: 2002:157671 USPATFULL
TITLE: Substituted imidazoles as dual histamine H1 and H3 agonists or antagonists
INVENTOR(S): Shih, Neng-Yang, North Caldwell, NJ, UNITED STATES
Aslanian, Robert G., Rockaway, NJ, UNITED STATES
Solomon, Daniel M., Edison, NJ, UNITED STATES
Rosenblum, Stuart B., West Orange, NJ, UNITED STATES
Mutahi, Mwangi Wa, Fords, NJ, UNITED STATES
Tom, Wing C., Cedar Grove, NJ, UNITED STATES
Mc Cormick, Kevin D., Edison, NJ, UNITED STATES
Piwinski, John J., Clinton Township, NJ, UNITED STATES
Wolin, Ronald, San Diego, CA, UNITED STATES

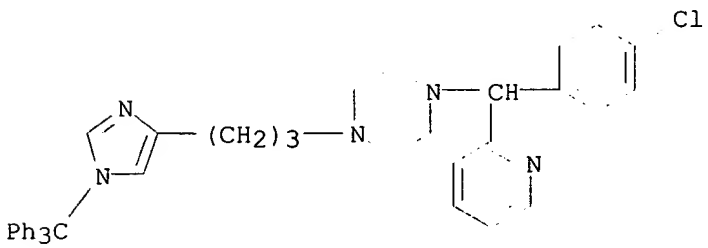
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002082278	A1	20020627
APPLICATION INFO.:	US 2001-955383	A1	20010918 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-234039P	20000920 (60)

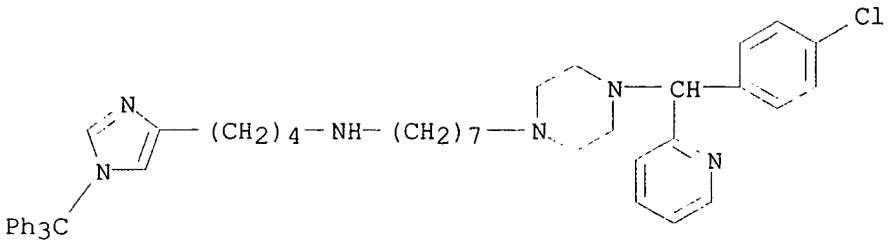
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SCHERING-PLOUGH CORPORATION, PATENT DEPARTMENT (K-6-1, 1990), 2000 GALLOPING HILL ROAD, KENILWORTH, NJ, 07033-0530
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 1353
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention discloses novel substituted imidazole compounds which have H.sub.3 receptor antagonist or dual histamine-H.sub.1 and H.sub.3 receptor antagonist activity as well as methods for preparing such compounds. In another embodiment, the invention discloses pharmaceutical compositions comprising such imidazoles as well as methods of using them to treat allergy, nasal congestion, inflammatory and CNS-related diseases and others.

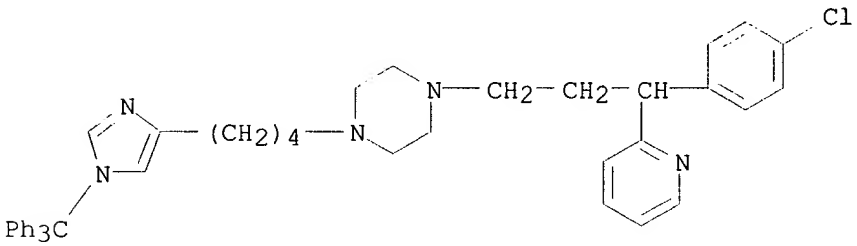
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **433976-33-1P 433976-35-3P 433976-39-7P 433976-40-0P 433976-43-3P**
(intermediate; prepn. of substituted imidazoles as dual histamine h1 and h3 agonists or antagonists)
RN 433976-33-1 USPATFULL
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-[3-[1-(triphenylmethyl)-1H-imidazol-4-yl]propyl]- (9CI) (CA INDEX NAME)



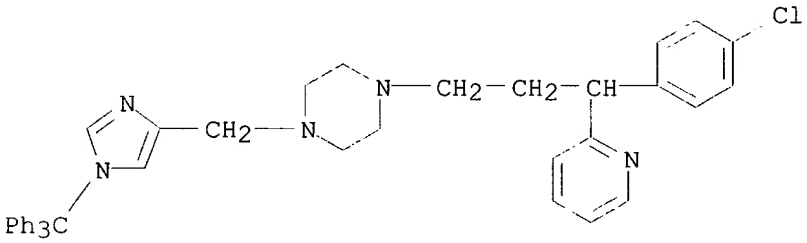
RN 433976-35-3 USPATFULL
CN 1-Piperazineheptanamine, 4-[(4-chlorophenyl)-2-pyridinylmethyl]-N-[4-[1-(triphenylmethyl)-1H-imidazol-4-yl]butyl]- (9CI) (CA INDEX NAME)



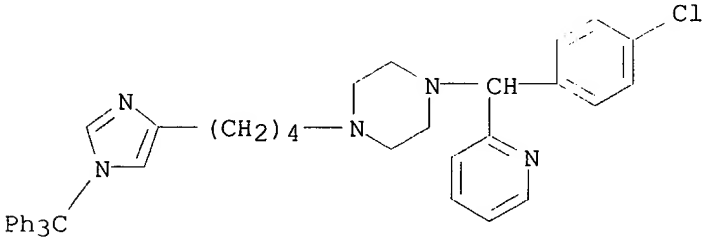
RN 433976-39-7 USPATFULL
CN Piperazine, 1-[3-(4-chlorophenyl)-3-(2-pyridinyl)propyl]-4-[4-[1-(triphenylmethyl)-1H-imidazol-4-yl]butyl]- (9CI) (CA INDEX NAME)



RN 433976-40-0 USPATFULL
CN Piperazine, 1-[3-(4-chlorophenyl)-3-(2-pyridinyl)propyl]-4-[[1-(triphenylmethyl)-1H-imidazol-4-yl]methyl]- (9CI) (CA INDEX NAME)

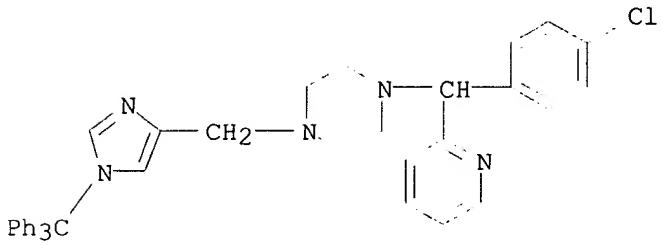


RN 433976-43-3 USPATFULL
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-[4-[1-(triphenylmethyl)-1H-imidazol-4-yl]butyl]- (9CI) (CA INDEX NAME)

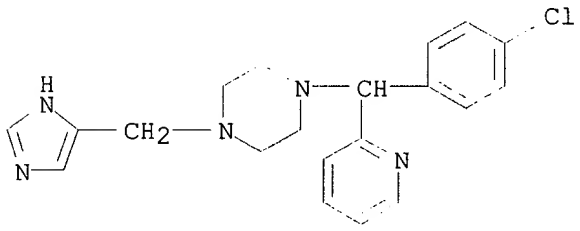


IT **433976-45-5**
(prepn. of substituted imidazoles as dual histamine h1 and h3 agonists or antagonists)

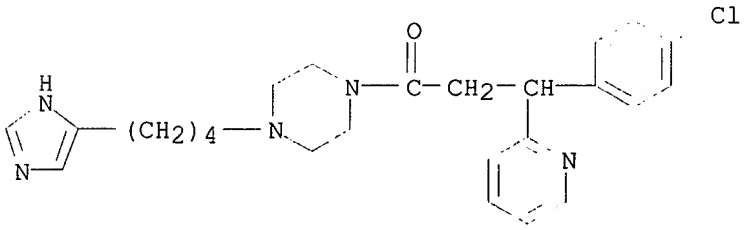
RN 433976-45-5 USPATFULL
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-[[1-(triphenylmethyl)-1H-imidazol-4-yl]methyl]- (9CI) (CA INDEX NAME)



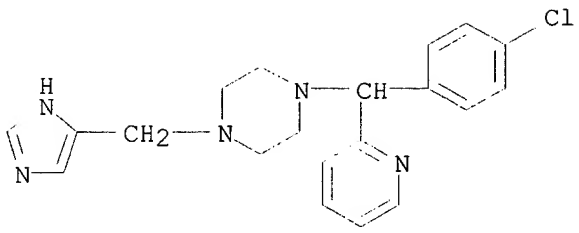
IT **433975-96-3P 433976-10-4P**
(target compd.; prepn. of substituted imidazoles as dual histamine h1 and h3 agonists or antagonists)
RN 433975-96-3 USPATFULL
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-(1H-imidazol-4-ylmethyl)- (9CI) (CA INDEX NAME)



RN 433976-10-4 USPATFULL
CN Piperazine, 1-[3-(4-chlorophenyl)-1-oxo-3-(2-pyridinyl)propyl]-4-[4-(1H-imidazol-4-yl)butyl]- (9CI) (CA INDEX NAME)

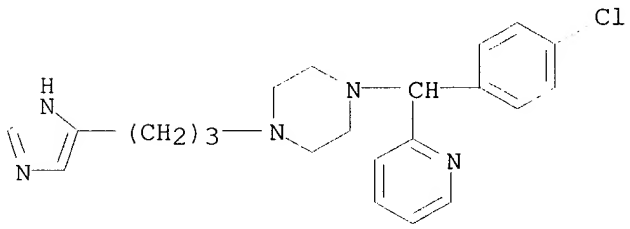


IT **433975-97-4P 433976-02-4P 433976-03-5P**
433976-04-6P 433976-05-7P 433976-06-8P
433976-07-9P 433976-08-0P 433976-09-1P
433976-11-5P 433976-14-8P 433976-15-9P
433976-30-8P 433976-31-9P 433976-32-0P
(target compd.; prepn. of substituted imidazoles as dual histamine h1 and h3 agonists or antagonists)
RN 433975-97-4 USPATFULL
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-(1H-imidazol-4-ylmethyl)-, hydrochloride (9CI) (CA INDEX NAME)



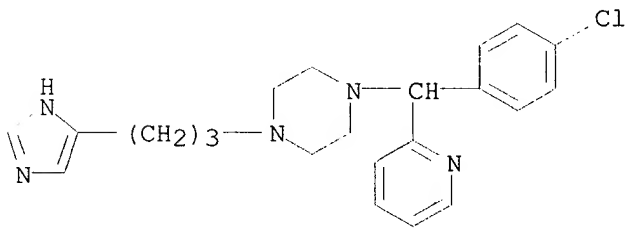
●x HCl

RN 433976-02-4 USPATFULL
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-[3-(1H-imidazol-4-yl)propyl]-, tetrahydrochloride (9CI) (CA INDEX NAME)

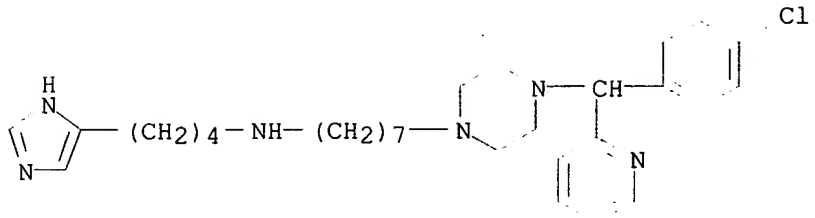


●4 HCl

RN 433976-03-5 USPATFULL
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-[3-(1H-imidazol-4-yl)propyl]- (9CI) (CA INDEX NAME)

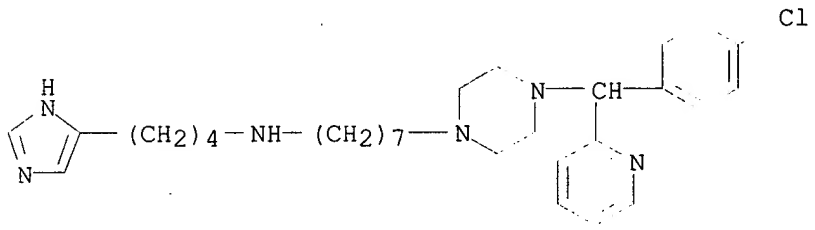


RN 433976-04-6 USPATFULL
CN 1-Piperazineheptanamine, 4-[(4-chlorophenyl)-2-pyridinylmethyl]-N-[4-(1H-imidazol-4-yl)butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

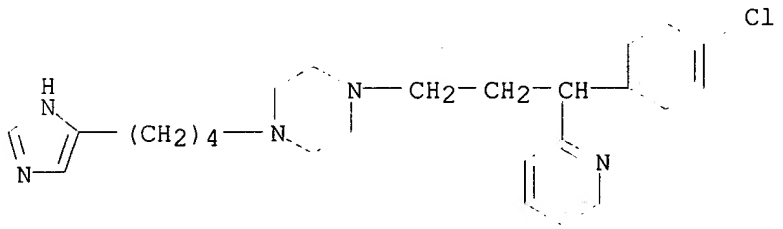


● HCl

RN 433976-05-7 USPATFULL
CN 1-Piperazineheptanamine, 4-[(4-chlorophenyl)-2-pyridinylmethyl]-N-[4-(1H-imidazol-4-yl)butyl]- (9CI) (CA INDEX NAME)

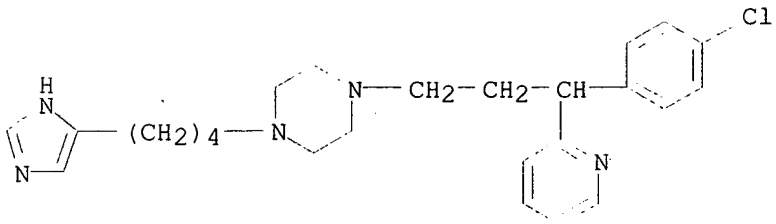


RN 433976-06-8 USPATFULL
CN Piperazine, 1-[3-(4-chlorophenyl)-3-(2-pyridinyl)propyl]-4-[4-(1H-imidazol-4-yl)butyl]-, hydrochloride (9CI) (CA INDEX NAME)

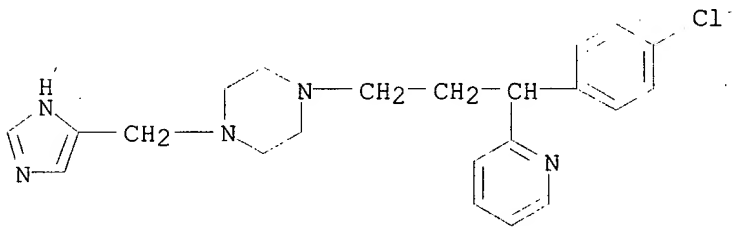


●x HCl

RN 433976-07-9 USPATFULL
CN Piperazine, 1-[3-(4-chlorophenyl)-3-(2-pyridinyl)propyl]-4-[4-(1H-imidazol-4-yl)butyl]- (9CI) (CA INDEX NAME)

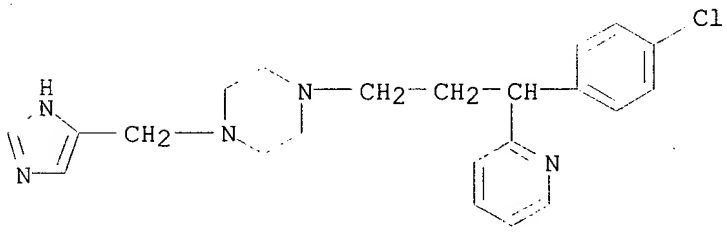


RN 433976-08-0 USPATFULL
CN Piperazine, 1-[3-(4-chlorophenyl)-3-(2-pyridinyl)propyl]-4-(1H-imidazol-4-ylmethyl)-, hydrochloride (9CI) (CA INDEX NAME)

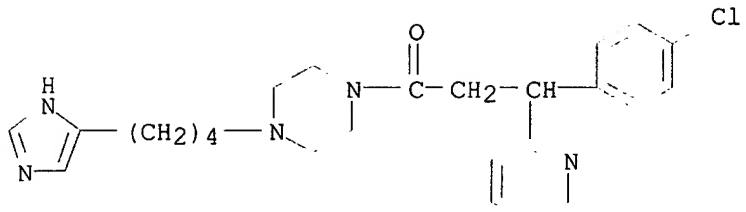


●x HCl

RN 433976-09-1 USPATFULL
CN Piperazine, 1-[3-(4-chlorophenyl)-3-(2-pyridinyl)propyl]-4-(1H-imidazol-4-ylmethyl)- (9CI) (CA INDEX NAME)

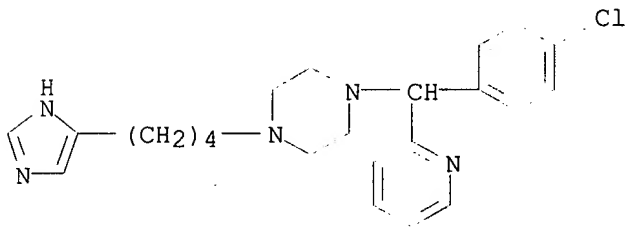


RN 433976-11-5 USPATFULL
CN Piperazine, 1-[3-(4-chlorophenyl)-1-oxo-3-(2-pyridinyl)propyl]-4-[4-(1H-imidazol-4-yl)butyl]-, hydrochloride (9CI) (CA INDEX NAME)



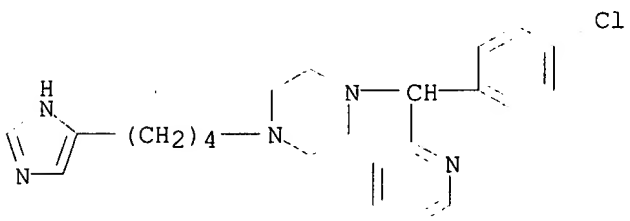
● x HCl

RN 433976-14-8 USPATFULL
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-[4-(1H-imidazol-4-yl)butyl]-, hydrochloride (9CI) (CA INDEX NAME)

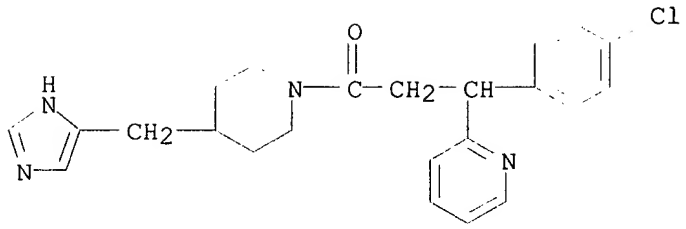


● x HCl

RN 433976-15-9 USPATFULL
CN Piperazine, 1-[(4-chlorophenyl)-2-pyridinylmethyl]-4-[4-(1H-imidazol-4-yl)butyl]- (9CI) (CA INDEX NAME)

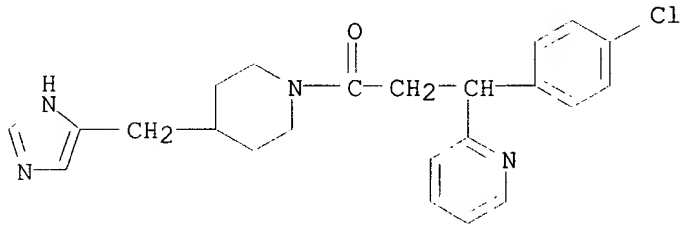


RN 433976-30-8 USPATFULL
CN Piperidine, 1-[3-(4-chlorophenyl)-1-oxo-3-(2-pyridinyl)propyl]-4-(1H-imidazol-4-ylmethyl)-, hydrochloride (9CI) (CA INDEX NAME)

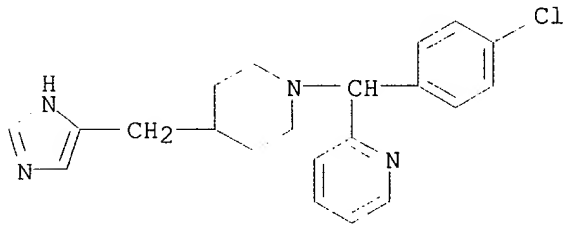


●x HCl

RN 433976-31-9 USPATFULL
CN Piperidine, 1-[3-(4-chlorophenyl)-1-oxo-3-(2-pyridinyl)propyl]-4-(1H-imidazol-4-ylmethyl)- (9CI) (CA INDEX NAME)



RN 433976-32-0 USPATFULL
CN Pyridine, 2-[(4-chlorophenyl)[4-(1H-imidazol-4-ylmethyl)-1-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



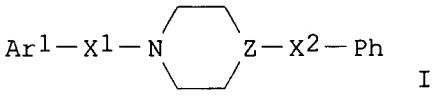
L10 ANSWER 3 OF 6 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 137:185513 MARPAT
TITLE: Preparation of piperidine and piperazine derivatives as inhibitors of p38.alpha. kinase
INVENTOR(S): Goehring, R. richard; Mavunkel, Babu J.; Liu, David Y.; Schreiner, George F.; Leudtke, Gregory; Lewicki, John A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 50 pp., Cont.-in-part of U.S. Ser. No. 385,494.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

Searched by Barb O'Bryen, STIC 308-4291

FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002115671	A1	20020822	US 2001-796997	20010228
US 6410540	B1	20020625	~~US 1999-385494~~	~~19990827~~
PRIORITY APPLN. INFO.:			US 1999-385494	19990827
			US 2000-185571P	20000228
			US 1998-98219P	19980828
			US 1999-125343P	19990319

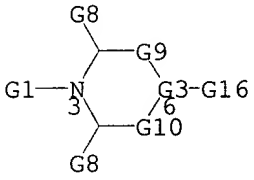
GI



I

AB The title compds. I [Ar1 = furanyl optionally substituted; X1 = CO; Z = N, CH; X2 = CH2, isostere; Ph may be optionally substituted], inhibitors of p38.alpha. kinase, were prepd. For example, 1-benzoyl-4-benzylpiperidine was prepd. in 96% yield by reaction of 4-benzylpiperidine and PhCOCl in the presence of diisopropylethylamine in CH2Cl2. In p38.alpha. kinase inhibition assays, I showed substantial inhibition at 15 .mu.M, some as high as 99%. I are useful for the treatment of conditions assocd. with activation of p38.alpha., in particular inflammation and cardiac conditions (no data).

MSTR 2



G3 = N
G9 = (0-4) 16

HC——G8
16

G10 = (0-3) 18

HC——G8
18

G13 = isoquinolinyl / imidazolyl
G14 = Ph (SO)
G15 = 59

HC——G14
59

G18 = Ak<(1-8)> (SO) .

MPL: disclosure
NTE: substitution is restricted
NTE: and pharmaceutically acceptable salts or compositions

L10 ANSWER 4 OF 6 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 135:227015 MARPAT
TITLE: Preparation of piperidine and piperazine derivatives as inhibitors of p38-.alpha. kinase
INVENTOR(S): Goehring, Richard R.; Mavunkel, Babu J.; Liu, David Y.; Schreiner, George F.; Luedtke, Gregory; Lewicki, John A.
PATENT ASSIGNEE(S): Scios, Inc., USA
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001064676	A2	20010907	WO 2001-US6715	20010228
WO 2001064676	A3	20020328		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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PRIORITY APPLN. INFO.: US 2000-185571P 20000228
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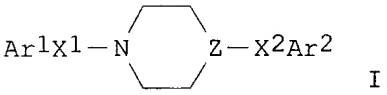
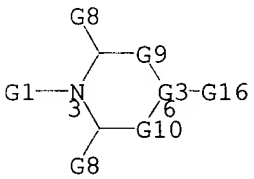


I

AB The title compds. I [Ar1 = furanyl optionally substituted; X1 = CO; Z = N, CH; X2 = CH2, isostere; Ar2 = substituted Ph], inhibitors of p38-.alpha. kinase, were prepd. E.g., 1-benzoyl-4-benzylpiperidine was prepd. by reaction of 4-benzylpiperidine and PhCOCl.

MSTR 2



G3 = N
G9 = (0-4) 16

HC——G8
16

G10 = (0-3) 18

HC——G8
18

G13 = isoquinolinyl / imidazolyl
G14 = Ph (SO)
G15 = 59

HC——G14
59

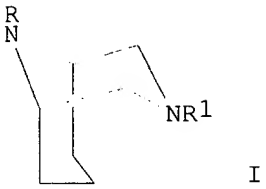
G18 = Ak<(1-8)> (SO)
MPL: disclosure
NTE: substitution is restricted
NTE: and pharmaceutically acceptable salts or compositions

L10 ANSWER 5 OF 6 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 135:180789 MARPAT
TITLE: Preparation of 3,9-diazabicyclo[3.3.1]nonane derivatives with analgesic activity
INVENTOR(S): Cignarella, Giorgio; Pinna, Gerard Aime
PATENT ASSIGNEE(S): Il Centro Consortile Ricerche Neuropsicofarmacologiche A R.L., Italy
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001060823	A1	20010823	WO 2001-EP1541	20010213
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001037377	A5	20010827	AU 2001-37377	20010213
EP 1259511	A1	20021127	EP 2001-909740	20010213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: IT 2000-MI293 20000218
WO 2001-EP1541 20010213

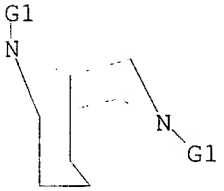
GI



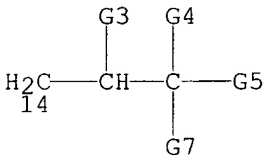
I

AB The title compds. I (R and R1, which are different from each other, are a straight or branched C2-C8 acyl group, a group of formula CH2CH:CBR2 or CH2CH2CHBR2 and B is a C6-C10 aryl group, C5-C7 cycloalkyl group, 5 or 6 membered heterocyclic arom. group, R2 = H, alkyl, cycloalkyl, Ph), having analgesic activity, were prepd. E.g., rearrangement of 9-propionyl-3,9-diazabicyclo[3.3.1.]nonane gave 3-propionyl-3,9-diazabicyclo[3.3.1.]nonane. Binding studies of I with .mu., .delta., and .kappa. opioid receptors was detd.

MSTR 1



G1 = 14



G5 = imidazolyl / pyridyl
G7 = Ph (SO (1-) G6)
MPL: claim 1
NTE: and pharmaceutically acceptable salts

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 6 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 126:8134 MARPAT
TITLE: Preparation of antineoplastic carbonylpiperazinyl and -piperidinyl derivatives which inhibit farnesyl protein transferase
INVENTOR(S): Doll, Ronald J.; Mallams, Alan K.; Afonso, Adriano; Rane, Dinanath F.; Njoroge, F. George; Rossman, Randall A.; Baldwin, John J.; Li, Ge; Reader, John C.
PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia, Inc.
SOURCE: PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

Searched by Barb O'Bryen, STIC 308-4291

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9631501	A1	19961010	WO 1996-US4169	19960403
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
ZA 9602694	A	19961003	ZA 1996-2694	19960403
CA 2217351	AA	19961010	CA 1996-2217351	19960403
AU 9654326	A1	19961023	AU 1996-54326	19960403
EP 820452	A1	19980128	EP 1996-911440	19960403
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, LT, LV, FI				
JP 10511979	T2	19981117	JP 1996-530361	19960403
JP 3038016	B2	20000508		
PRIORITY APPLN. INFO.:			US 1995-418319	19950407
			WO 1996-US4169	19960403

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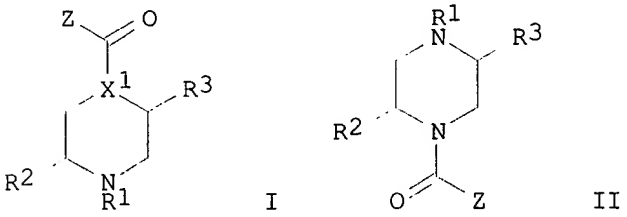
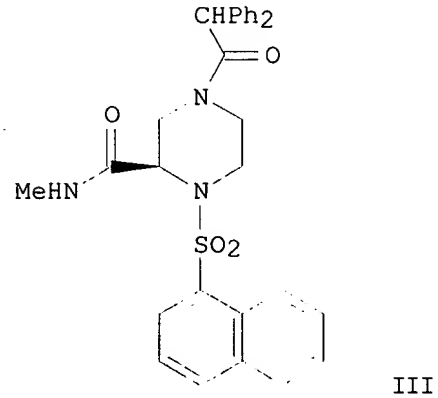
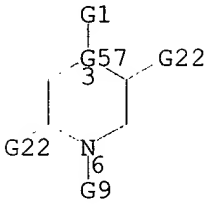




AB The title compds. [I, II; R1 = carbonyl- or sulfonyl-contg. moiety; R2, R3 = aminocarbonyl- or carboxyalkyl-contg. moiety; Z = (un)substituted quinolinyl, (un)substituted quinolinylalkyl, (un)substituted naphthyl, (un)substituted naphthylalkyl, (un)substituted diphenylmethyl, (un)substituted diphenylalkyl, etc.] (e.g., III; IC50 for farnesyl protein transferase <10 mM), useful for inhibiting the Ras function and therefore inhibiting the abnormal growth of cells (e.g., cancer), are prepd. and I-contg. formulations presented.

MSTR 1



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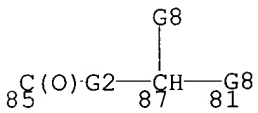
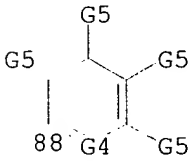


G4 = 51 / N

G8 = 88



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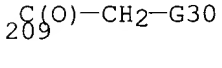

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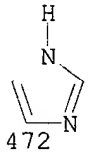

G57 = N
DER: or pharmaceutically acceptable salts
MPL: claim 1
NTE: substitution is restricted
NTE: additional ring formation is allowed

=> fil cao; d que nos 16; fil hom
FILE 'CAOLD' ENTERED AT 09:51:03 ON 24 FEB 2003

FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

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